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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,191	06/20/2003	Douglas L. Keil	LAM1P175/P1148	8804
22434	7590	06/29/2006	EXAMINER	
BEYER WEAVER & THOMAS, LLP			FULLER, ERIC B	
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OAKLAND, CA 94612-0250			PAPER NUMBER	
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Please find below and/or attached an Office communication concerning this application or proceeding.



## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of Group I, claims 1-10, in the reply filed on April 19, 2006 is acknowledged.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Keller et al. (US 6,051,151).

Keller teaches a plasma chamber for processing substrates (36) that uses mechanical and magnetic means to confine the plasma (column 4, lines 14-24). The magnets may be rings embedded in the chamber walls (figure 3) or embedded in a separate confinement ring (figure 4). Either embodiment reads on the applicant's claims. Increasing the amount of collisions is a function of the confined plasma. Figure 3 shows the magnetic fields passing through the ring. Figure 4 shows the multiple magnets of differing diameters.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller et al. (US 6,051,151), as applied to claim 2 above, and further in view of Lenz (US 6,019,060).

Keller teaches the limitations above, but is silent to the confinement ring being movable. However, Lenz teaches a system in which the confinement ring is movable in order to adjust the pressure of the plasma and to account for the pressure drop across the confinement ring (abstract; column 3, lines 4-20). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to use a movable confinement ring in the process taught by Keller. By doing so, one would reap the benefits of controlling the pressure of the plasma.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen et al. (US 6,872,281 B2) teaches that the two known methods for confining plasma is the mechanical means of a confinement ring and the magnetic means of a magnetic ring (column 1, lines 39-65). This is pertinent to the applicant's disclosure, as it proposes to use a combination of both.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric B. Fuller whose telephone number is (571) 272-1420. The examiner can normally be reached on Mondays through Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks, can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



EBF



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SUPERVISORY PATENT EXAMINER